2021
PUBLIC SAFETY POWER SHUTOFF READINESS
California Public Utilities Commission
August 3, 2021
SCE PSPS ACTION PLAN:
2021

1. **REDUCE**  THE USE OF PSPS
2. **EXECUTE** PSPS EVENTS EFFECTIVELY
3. **MITIGATE** THE IMPACTS OF PSPS
4. **INFORM** PARTNERS AND CUSTOMERS
5. **IMPROVE** POST-EVENT REPORTING
### PSPS ACTION PLAN: **BY THE NUMBERS**

<table>
<thead>
<tr>
<th><strong>72</strong></th>
<th>Frequently impacted circuits targeted for expedited grid hardening</th>
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<tbody>
<tr>
<td><strong>70%</strong></td>
<td>Reduction in PSPS duration for the most frequently impacted circuits*</td>
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<tr>
<td><strong>More than 700</strong></td>
<td>miles of covered conductor to be deployed as part of expedited grid hardening</td>
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<tr>
<td><strong>7</strong></td>
<td>New switches</td>
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<tr>
<td><strong>9</strong></td>
<td>New weather stations</td>
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<tr>
<td><strong>17</strong></td>
<td>Automation upgrades of existing switches</td>
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<tr>
<td><strong>5</strong></td>
<td>New Community Resiliency zones</td>
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<tr>
<td><strong>81,000</strong></td>
<td>Customers removed from PSPS scope through exceptions and switching protocols</td>
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<tr>
<td><strong>100+</strong></td>
<td>Virtual meetings with our communities and partners in 2021</td>
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<tr>
<td><strong>4,363</strong></td>
<td>Critical Care backup batteries deployed since program inception</td>
</tr>
<tr>
<td><strong>58%</strong></td>
<td>Reduction in scope, 47% Reduction in event frequency on frequently impacted circuits*</td>
</tr>
<tr>
<td><strong>78</strong></td>
<td>Circuit segment exceptions approved in 2021</td>
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* Assummes identical weather and fuel conditions as 2020
Expedited grid hardening will **reduce the need for PSPS on the 72 most frequently impacted circuits by:**

- Installing covered conductor
- Increasing circuit segmentation
- Adding weather stations
- Updating switching/operational protocols

Targeting completion by October 1.

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**81,000**

CUSTOMERS REMOVED FROM PSPS CONSIDERATION THROUGH EXCEPTIONS AND SWITCHING PROTOCOLS

**70%**

ESTIMATED REDUCTION IN PSPS OUTAGE DURATION BY OCTOBER 1*

**Progress:** 30% estimated reduction in PSPS outage duration has been achieved to date. Resolving construction challenges on select circuits.

* Based on historical analysis that assumes weather and fuel conditions are identical to 2020 and calculates the reduction in PSPS outages on frequently impacted circuits that would occur if the mitigations had been in place for those 2020 events.
REReducing PSpS: Preparing For Fire Season Through Inspections

Annual Inspections
Performing annual inspections beyond compliance requirements for over 160,000 distribution and 16,000 transmission structures to evaluate for fire season risk

- 170,000+ completed distribution ground inspections
- 100,000+ completed aerial distribution inspections
- 17,000+ completed transmission ground and aerial inspections
- 50% of distribution circuits via infrared technology

Summer Readiness
Launched 2021 summer readiness initiative to increase safety through accelerated inspections for 12,000 distribution and 6,700 transmission structures for Areas of Concern (AOCs)

- 6,000 risk inspections for newly identified distribution structures in the top 5 AOCs
- 7,000 aerial inspections for newly identified distribution and transmission structures
- Accelerated brush clearing for 11,000 poles
VEGETATION MANAGEMENT

Reduces the threat that objects could contact powerlines

- **1.4 million trees** in right-of-way areas inspected annually and ~70% are pruned

- **150,000 trees** outside rights-of-way are assessed for hazards and ~10% removed

- **11,000 palm trees posing potential blow-in hazards** to be removed within the next two years. From Jan.-Jun. 2021, SCE conducted nearly **5,000 removals** and **600 crown reductions**
EXECUTING PSPS EFFECTIVELY: THRESHOLDS FOR ACTIVATION AND DE-ENERGIZATION

**FIRE POTENTIAL INDEX (FPI)**

Formula estimates the potential of fire ignition and spread:
- Normal: 1-11
- Elevated: 12-14
- Extreme: 15+

**WINDSPEED THRESHOLD FOR ACTIVATION**

Wind speeds at which our system is vulnerable to flying debris or that pose a risk to our infrastructure.

**ACTIVATION THRESHOLDS FOR MOST CIRCUITS**

- Currently set at 12, systemwide
  - Under evaluation to add further granularity
- **Bare wire circuits:**
  - 99\textsuperscript{th} percentile historic windspeed for a given circuit or NWS Wind Advisory of sustained windspeeds of 31 mph or gusts of 46 mph
- **Fully covered conductor circuits:**
  - NWS High Wind Warning of sustained windspeeds of 40 mph or gusts of 58 mph

**DE-ENERGIZATION THRESHOLD**

Wind speeds determined separately for each circuit based on specific risks of the event.

Technical paper and fact sheet available at sce.com/pspsdetermination
EXECUTING PSPS EFFECTIVELY:
DECISION-MAKING TRANSPARENCY

- **PRE-PLANNING**
  - Increase precision and granularity of forecast with addition of 2 new supercomputers and additional weather model data source

- **EVENT PLANNING**
  - More accurate weather forecasting using machine learning language for 61 weather stations

- **IMT ACTIVATION**
  - PSPS risk and benefit modeled independently 24 hours in advance of period of concern

- **DURING PERIOD OF CONCERN**
  - Additional weather stations increase real-time situational awareness

- **RE-ENERGIZATION**
  - More transparent post-event reporting to better articulate decision-making factors
  - Standardized/enhanced in-event engagement with CA State Warning Center
EXECUTING PSPS EFFECTIVELY:
IMPROVED NOTIFICATIONS

2020

Friday 7:00 AM

SCE Safety Alert: Southern California Edison has proactively turned off power to the Beaumont area due to fire weather conditions. Your power may be restored at any time...

2021

Friday 7:00 AM

SCE Start of Shutoff Alert: We are temporarily shutting off your power due to high risk of wind-driven wildfire in your area. These conditions could last through Thursday afternoon. We will restore your power as soon as it’s safe. Restoration typically takes 3-8 hours but could take longer if there is damage in your area...

REVISED MESSAGES

INCREASED ACCURACY & TIMING

PUBLIC SAFETY & CRITICAL INFRASTRUCTURE OUTREACH
INFORMING PARTNERS AND CUSTOMERS:
NEW PUBLIC SAFETY PARTNER PORTAL AND SCE.COM IMPROVEMENTS

SCE.COM ENHANCEMENTS
• Consolidated outage address search feature sce.com/wildfire/addresslookup
• New AFN web page sce.com/afn

PUBLIC SAFETY PARTNER PORTAL
• Available information 24/7 to help with safety planning
• During events provides current PSPS status and information
INFORMING PARTNERS AND CUSTOMERS:
INCREASED PROGRAM OUTREACH

Informing customers ahead of fire season about available programs and services. Generated **410 million impressions** on PSPS and emergency preparedness so far this year.

- Digital
- Social media
- Radio
- Bill messages
- Connected TV
- Newsletters
- Newspapers
- 20 languages

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**You can reduce your energy costs if you rely on medical equipment at home.**

If you use certain electrically powered medical devices at home, the Medical Baseline Allowance Program:

- Provides more electricity at the lowest available rate
- Has no income eligibility requirement
- No note from a medical professional is needed before June 30, 2021

In addition, you can sign up for Outage Alerts to help you be better prepared for emergencies and Public Safety Power Shutoffs.

To find out if you qualify for a reduced rate, visit sce.com/medicalbaseline or call 1-800-655-4555.

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**In an emergency or a Public Safety Power Shutoff,**

**we want you to be informed.**

**Sign up today for outage alerts.**

**Stay informed. Stay safe.**
To identify and better serve customers with access and functional needs (AFN), we are:

- Collaborating with the Hospital Association of Southern California to reach patients across 185 hospitals
- Engaging with the Statewide AFN Council to reach the clients of council agencies
- Leveraging 1,600 CBOs to reach their networks
- Medical Baseline enrollments increased 6%*
- Identified 2 million AFN customers
- New dedicated AFN liaison officer during PSPS events
- Expanded escalated notification attempts, including in-person, if necessary, to all Medical Baseline customers

* From December 2020 to June 2021
MITIGATING IMPACTS OF PSPS: EXPANDED CUSTOMER CARE PROGRAMS FOR AFN

CRITICAL CARE BACKUP BATTERY

Expanded fully subsidized Critical Care Backup Battery program to support all eligible Medical Baseline customers*

- **3,642** deployed to-date in 2021
- **4,363** cumulative since 2020
- **5,000** forecasted by year-end

PORTABLE GENERATOR $500 REBATE

Expanded to all Medical Baseline or income-qualified customers, and removed water pumping dependency

211 REFERRAL SERVICE

Offers services, outreach, and customer support to AFN customers (September 2021)

*Enrolled in Medical Baseline Allowance program, CARE or FERA, and in HFRA
Note: See appendix for a comprehensive list of programs
M ITIGATING IMPACTS OF PSPS: EXPANDED CUSTOMER ASSISTANCE

PORTABLE GENERATOR
$200 REBATE
New rebate available to all HFRA customers

POWERSTATION BATTERY
REBATE INCREASED TO $75
Increased from $50, available to all HFRA customers

DISCOUNTED HOTELS
Expanded number of hotels offering discounts to SCE customers in HFRAs
MITIGATING IMPACTS OF PSPS: SUPPORTING OUR COMMUNITIES

Keeping local officials updated to support their response efforts.

Consulting community, CBO, public health and local and tribal governments during each event.

**8**

COMMUNITY CREW VEHICLES (CCV)
Can be deployed rapidly for remote locations. Location and hours listed online before shutoffs.

**63**

COMMUNITY RESOURCE CENTERS (CRC)
Contracted and available based on potential shutoff locations. Location and hours listed online before shutoffs.

**8**

RESILIENCY ZONES
Enable backup power generation at certain essential sites in remote communities.

* 5 ready; 3 in-progress
INFORMING PARTNERS AND CUSTOMERS:
INCREASED COMMUNITY OUTREACH

Sharing information with stakeholders and customers.

Building on feedback to better communicate, coordinate, and share information.

11 COMMUNITY MEETINGS

14 POWER OUTAGE WEBINARS

13 COUNTY EMERGENCY MANAGEMENT AGENCY MEETINGS

10 CRITICAL INFRASTRUCTURE PROVIDER WORKSHOPS

8 PSPS WORKING GROUP & ADVISORY BOARD MEETINGS

Time frame: March – July 2021
Engaging with **140 local and tribal governments** in HFRAs.

- Soliciting input on areas including CRC/CCV locations, AFN engagement, and community safety
- PSPS workshops for tribal governments to understand specific needs and get feedback
- Workshops on resiliency efforts and best practices
- Training sessions on Public Safety Partner Portal
- Communication exercises to test PSPS email and text notifications

**SURVEY OF LOCAL GOVERNMENTS IN HIGH FIRE RISK AREAS***

- **90%** Familiar with SCE’s work to reduce wildfire risk
- **98%** Familiar with or heard of SCE’s PSPS program
- **63%** Support SCE’s PSPS program

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* Third-party survey conducted on behalf of SCE in Feb/March 2021
We will always **listen, respond** and **improve** our PSPS program so we can **better care** for our customers and communities while keeping them **safe**.
Q&A
**SCE PSPS: ACTION PLAN PROGRESS**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>PROGRESS</th>
<th>DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>REDUCE THE USE OF PSPS</td>
<td>COMPLETE AS OF 7/28/21</td>
<td>5 OF 7 ACTIVITIES</td>
</tr>
<tr>
<td>EXECUTE PSPS EFFECTIVELY</td>
<td>49 OF 60 ACTIVITIES</td>
<td>We’ve improved PSPS notifications – by improving notification clarity, eliminating redundancies and automating processes to be more efficient. We’re developing and posting media and education materials on our website** to improve transparency and understanding for Public Safety Partners and customers.</td>
</tr>
<tr>
<td>MITIGATE PSPS IMPACTS</td>
<td>7 OF 11 ACTIVITIES</td>
<td>We are expanding important customer programs like our Critical Care Backup Battery program to help customers through PSPS events. We are making it easier for customers to enroll in our Medical Baseline program and are developing a website to provide resources for our customers with Access and Functional Needs</td>
</tr>
<tr>
<td>INFORM PARTNERS &amp; CUSTOMERS</td>
<td>31 OF 48 ACTIVITIES</td>
<td>We launched our Public Safety Partner Portal and are making enhancements to our SCE.com page to improve access to information before and during PSPS events. We have hosted over 100 virtual community meetings, Power Talks, and discussions and continue to plan events and workshops to help communities prepare for PSPS.</td>
</tr>
<tr>
<td>IMPROVE POST-EVENT REPORTING</td>
<td>5 OF 5 ACTIVITIES</td>
<td>We partnered with PG&amp;E, SDG&amp;E and the CPUC to align on a common reporting format to improve the clarity and consistency of PSPS post-event reporting. The PSPS OIR Phase 3 Decision helped inform the structure and content of the post-event reports.</td>
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* Assuming identical weather and fuel conditions as 2020
** sce.com/pspsdirectionmaking
**PSPS MITIGATIONS:**

**PROGRAM UPDATE**

**Expedited Grid Hardening**
- Completed installation of 382 miles (53%) of covered conductor from target of 718 miles
- Addressing construction challenges resulting in low confidence miles – developing mitigations to recover portion or most of the CMI (customer minutes of interruption)
- Increasing wind speed thresholds for circuits or circuit segments where covered conductor installation is complete

**Circuit Segment Exceptions**
- Reviewed 91 circuits in 2021 to analyze whether wildfire risk is temporarily abated or no longer exists on certain circuit segments
- Approved 78 of 91 exceptions, resulting in 81K customers removed from PSPS scope, and an additional 17K customers benefiting from raised wind speed thresholds due to exception review

**Anticipated PSPS Reduction on Frequently Impacted Circuits***
- Scope (customers shut off): 58%
- Frequency (circuits de-energized): 47%
- Duration (CMI): 70%

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* Assuming identical weather and fuel conditions as 2020
## PROGRAMS AND SERVICES:
### FOR AFN CUSTOMERS

| Resource Centers, Cool Centers, and Resiliency Zones | • 63 Community Resource Centers (CRCs) & 8 mobile Community Crew Vehicles (CCVs)  
• Cool centers administered by cities and counties from June 1 to October 15; SCE provides battery operated fans, snacks, water, etc.  
• 8 Resiliency Zones (5 ready; 3 in-progress) which provide temporary generation to certain essential sites in communities (e.g., gas stations)  
  
  At CRC and CCV locations, community members can access:  
  • Wi-fi, mobile charging for devices such as cell phones or medical equipment (available pending COVID-19 protocols), bottled water, light snacks  
  • Firewood, blankets, bulk water, ice (dependent on weather and or location specific needs)  
  • Cooling/heating, seating, refrigeration for medicine (some locations), ADA accessible restroom (all available at indoor CRCs only, pending COVID-19 protocols)  
  • Resiliency kits are provided at CRC/CCV locations, and are in a tote bag with program fact sheets, resiliency items (e.g., LED backup lightbulb or flashlight, pre-charged solar phone charger), and PPE (hand sanitizer, mask)  
• Ice vouchers |
| Back Up Power Programs | • Critical Care Backup Battery (CCBB) program provides a right-sized, fully subsidized back-up battery with a solar panel for charging and a 3-year warranty to eligible customers (customers enrolled in Medical Baseline, California Alternate Rates for Energy (CARE) or Family Electric Rate Assistance (FERA), and in HFRAs)  
• $75 rebate for portable batteries for customers in HFRAs  
• $200 rebate for portable generators for customers in HFRAs  
• $500 rebate for portable generators for customers either enrolled in the Medical Baseline program or enrolled in CARE/FERA in HFRAs  
• Statewide Self-Generation Incentive Program (SGIP) |
| Food, Transportation, Temporary Lodging | • 211 Referral Service (estimated launch in Sep. 2021): provide outreach, case management support in PSPS preparedness, and direct services (meal delivery, transportation, and temporary lodging for AFN customers)  
• Discounted hotels also available in HFRAs |
| Medical Baseline & Self-Certify Sensitive | • Medical Baseline Allowance program supports our customers who rely on electrically powered medical devices, and provides additional electricity (16.5 kWh) at the lowest price per day  
• If a household member has a condition that can be significantly affected by a disconnection of service, customers have the option to temporarily self-certify as sensitive for 90 days, which will enable an in-person visit, if contact cannot be made |
| Notifications and In-Event Management | • Medical Baseline customers will receive escalated contact attempts, including an in-person visit, if necessary, upon PSPS notification delivery failures  
• Enrolled alert account holders of record to receive customer notifications before, during, and after PSPS events via phone, text, and email  
• Non-account holders can receive zip code level alerts and alerts from social media/NextDoor  
• Dedicated AFN Liaison Officer during events and coordination with CBOs (estimated for Sep. 2021)  
• Back-up generator requests considered on an emergency basis |
| Income-Qualified & Disadvantaged Community (DAC) Programs | • CARE reduces energy bills for eligible customers by about 30%; FERA reduces electric bills for qualified households by 18%  
• Energy Savings Assistance Program (ESAP); Low Income Home Energy Assistance Program (LIHEAP) referrals; Energy Assistance Fund  
• Arrearage Management Plan (AMP) Program, California’s Emergency Renters Assistance Program (ERAP) outreach, payment arrangements  
• Single-Family Affordable Solar Homes (SASH); Disadvantaged Community Single-Family Affordable Solar Homes (DAC-SASH); Solar on Multifamily Affordable Housing (SOMAH)  
• Electric vehicle programs; Disadvantaged Community pilots (e.g., San Joaquin Valley electrification pilot) |
SCE uses AFN density data to inform decisions

- Risk of de-energization analysis
- Activation of Community Resource Center locations through SCE’s Customer Dashboard (AFN population density by circuit)

SCE is collaborating with the AFN Statewide Council to identify “electricity dependent” clients of the IHSS program, Regional Centers, and Medicare on an aggregated basis
FOR MORE INFORMATION:

SCE Wildfire Webpage – sce.com/wildfire

SCE Notifications
- Sign up for PSPS alerts – sce.com/pspsalerts
- Sign up for the Energized by Edison Wildfire Mitigation Newsletter – energized.edison.com/newsletter

Situational Awareness
PSPS maps and information – sce.com/psps
- PSPS decision making – sce.com/pspsdecisionmaking
- Role of weather in PSPS – sce.com/fireweather
- CPUC wildfire maps – ia.cpuc.ca.gov/firemap/
- Fire cameras – alertwildfire.org

Preparedness
- SCE emergency preparedness – sce.com/beprepared
- CAL FIRE preparedness – readyforwildfire.org

Vegetation Management
- Vegetation Management – sce.com/safety/power-lines; contact 1-800-655-4555 or safetrees@sce.com

Customer Programs & Rebates
- SCE Customer Programs & Resources – sce.com/customerresources
- SCE Marketplace (rebates and programs) – marketplace.sce.com
- SCE Medical Baseline Program – sce.com/medicalbaseline
- Self Generation Incentive Program (SGIP) – sce.com/sgip or selfgenca.com

Community Meetings
- Join SCE’s wildfire safety community meetings – sce.com/wildfiresafetymeetings